

CLAIMS:

following claims and their equivalents.

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We claim:

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. A method of communicating between a first process on a first computer and a destination on a second computer, the method comprising:

receiving destination/information indicative of the destination from the first process;

determining a transport protocol for a message object based on the destination information;

generating the message object based on the destination information; receiving message information indicative of a message to be transmitted from the first process to the destination; and

transmitting the message information from the first process to the destination using the message object and the determined transport protocol.

- 2. The method of claim 1 wherein the destination comprises a second process on the second computer.
- 3. The method of claim 2 wherein the destination information comprises a name of the second process on the second computer.
- 4. The method of claim 2 wherein the transport protocol comprises process to process.
- 5. The method of claim 1 wherein the destination comprises a pathway to the second computer.
- 6. The method of claim 5 wherein the destination information comprises a name of the 25 pathway to the second computer.
  - 7. The method of claim 5 wherein the transport protocol comprises process to pathway.
- 8. The method of claim 1 wherein the destination comprises a socket on the second 30 computer.

- 9. The method of claim 8 wherein the destination information is an address of the second computer.

  10. The method of claim 9 wherein the address comprises an Internet Protocol address.
- 11. The method of claim 9 wherein the address comprises a port number of the socket.
- 12. The method of claim 8 wherein the transport protocol comprises process to socket.
- 10 13. The method of claim 1 where in the message information comprises the message.
  - 14. The method of claim 1 wherein the message information comprises a pointer to the message.
  - 15. The method of claim 1 wherein the message information comprises a length of the message.
  - 16. The method of claim 1 wherein the message is waited.
- 20 17. The method of claim 1 wherein the message is nowait.
  - 18. The method of claim 1 further comprising checking for errors.
- 19. The method of claim 18 further comprising calling an error service in response to the error.
  - 20. The method of claim 1 further comprising generating a unique identifier for the message.
- 30 21. The method of claim 1 further comprising receiving a reply from the second computer.

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- 22. The method of claim 1 further comprising registering a service.
- 23. The method of claim 1 further comprising receiving the message information from the first process into the destination.
- 24. A software product for communicating between a first process on a first computer and a destination on a second computer, comprising:

communication software operational when executed by a processor to direct the processor to receive destination information indicative of the destination from the first process, determine a transport protocol for a message object based on the destination information, generate the message object based on the destination information, receive message information indicative of a message to be transmitted from the first process to the destination, and transmit the message information from the first process to the destination using the message object and the determined transport protocol; and

a software storage medium operational to store the communication software.

- 25. The software product of claim 24 wherein the destination comprises a second process on the second computer.
- 26. The software product of claim 25 wherein the destination information comprises a name of the second process on the second computer.
- 27. The software product of claim 25 wherein the transport protocol comprises process to process.
- 28. The software product of claim 24 wherein the destination comprises a pathway to the second computer.
- 30 29. The software product of claim 28 wherein the destination information comprises a name of the pathway to the second computer.

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- 30. The software product of claim 28 wherein the transport protocol comprises process to pathway.
- 5 31. The software product of claim 24 wherein the destination comprises a socket on the second computer.
  - 32. The software product of claim 31 wherein the destination information is an address of the second computer.
  - 33. The software product of claim 32 wherein the address comprises an Internet Protocol address.
  - 34. The software product of claim 32 wherein the address comprises a port number of the socket.
  - 35. The software product of claim 31 wherein the transport protocol comprises process to socket.
- 20 36. The software product of claim 24 wherein the message information comprises the message.
  - 37. The software product of claim 24 wherein the message information comprises a pointer to the message.
  - 38. The software product of claim 24 wherein the message information comprises a length of the message.
  - 39. The software product of claim 24 wherein the message is waited.
  - 40. The software product of claim 24 wherein the message is nowait.

- 41. The software product of claim 24 wherein the communication software is operational when executed by the processor to direct the processor to check for errors.
- 5 42. The software product of claim 41 wherein the communication software is operational when executed by the processor to call an error service in response to the error.
  - 43. The software product of claim 24 wherein the communication software is operational when executed by the processor to generate a unique identifier for the message.
  - 44. The software product of claim 24 wherein the communication software is operational when executed by the processor to receive a reply from the second computer.
  - 45. The software product of claim 24 wherein the communication software is operational when executed by the processor to register a service.